



## Complete Summary

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### TITLE

Immunizations: percentage of adolescents who are up-to-date with recommended immunizations (Hep B, MMR, tetanus, and verification of varicella immunity).

### SOURCE(S)

Institute for Clinical Systems Improvement (ICSI). Immunizations. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2004 Jun. 56 p. [61 references]

## Brief Abstract

### DESCRIPTION

This measure assesses the percentage of adolescents who are up-to-date with recommended immunizations (Hep B, MMR, tetanus, and verification of varicella immunity).

### RATIONALE

The priority aim addressed by this measure is to increase the rate of people up-to-date with recommended immunizations.

### PRIMARY CLINICAL COMPONENT

Immunization; Hepatitis B (Hep B); measles, mumps, rubella (MMR); tetanus and diphtheria toxoids (Td); varicella (VZV)

### DENOMINATOR DESCRIPTION

All adolescents age 12 to 17 with continuous enrollment who presented for a primary care visit in the specified quarter

### NUMERATOR DESCRIPTION

Number of adolescents in denominator who are up-to-date with recommended immunizations (see the related "Numerator Inclusions/Exclusions" field the Complete Summary)

## Evidence Supporting the Measure

### PRIMARY MEASURE DOMAIN

Process

## SECONDARY MEASURE DOMAIN

Not applicable

## EVIDENCE SUPPORTING THE MEASURE

A clinical practice guideline or other peer-reviewed synthesis of the clinical evidence

## NATIONAL GUIDELINE CLEARINGHOUSE LINK

- [Immunizations.](#)

## Evidence Supporting Need for the Measure

### NEED FOR THE MEASURE

Unspecified

## State of Use of the Measure

### STATE OF USE

Current routine use

### CURRENT USE

Internal quality improvement

## Application of Measure in its Current Use

### CARE SETTING

Physician Group Practices/Clinics

### PROFESSIONALS RESPONSIBLE FOR HEALTH CARE

Physicians

### LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED

Group Clinical Practices

### TARGET POPULATION AGE

Age 12 to 17 years

## TARGET POPULATION GENDER

Either male or female

## STRATIFICATION BY VULNERABLE POPULATIONS

Unspecified

### Characteristics of the Primary Clinical Component

## INCIDENCE/PREVALENCE

For immunized children with household exposure to varicella, the attack rate is 25%. For unimmunized children with household exposure, the rate is 90%. This is an effectiveness rate of 72%. However, the vaccine is more than 95% effective in preventing serious disease (greater than 300 lesions and a fever). With natural exposure (i.e., just being in the community) a 1 to 3% annual breakthrough rate occurs in vaccinated children.

## EVIDENCE FOR INCIDENCE/PREVALENCE

Institute for Clinical Systems Improvement (ICSI). Immunizations. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2004 Jun. 56 p. [61 references]

## ASSOCIATION WITH VULNERABLE POPULATIONS

Unspecified

## BURDEN OF ILLNESS

Unspecified

## UTILIZATION

Unspecified

## COSTS

Unspecified

### Institute of Medicine National Healthcare Quality Report Categories

## IOM CARE NEED

Staying Healthy

## IOM DOMAIN

## Data Collection for the Measure

### CASE FINDING

Users of care only

### DESCRIPTION OF CASE FINDING

Adolescents ages 12 to 17

This measure should be collected through:

- Identifying eligible adolescents who presented in the target quarter for a primary care visit who have maintained continuous enrollment for 18 months.
- Reviewing the record to determine if all recommended doses were given within the recommended time frames.

The suggested time period for data collection is quarterly.

### DENOMINATOR SAMPLING FRAME

Patients associated with provider

### DENOMINATOR (INDEX) EVENT

Encounter  
Patient Characteristic

### DENOMINATOR INCLUSIONS/EXCLUSIONS

#### Inclusions

All adolescents age 12 to 17 with continuous enrollment who presented for a primary care visit in the specified quarter

#### Exclusions

Unspecified

### NUMERATOR INCLUSIONS/EXCLUSIONS

#### Inclusions

Number of adolescents in denominator who are up-to-date with recommended immunizations\*

\*An adolescent is up-to-date with recommended immunizations if:

- Hep B:
  - 3 doses (all given within 18 months of the first Hep B dose)

or

- 2 doses Recombivax® HB given 4 to 6 months apart (see "Notes" below)
- MMR: 2 doses (first dose greater than or equal to 1 yr old; second dose 4 to 6 years)
- Td: 3 or 4 doses (second dose 4 weeks after first; third dose 6 months after second dose; booster every 10 years)
- VZV: 1 dose or documented history of varicella

Notes: Adolescents (age 11 to 15 years) can be immunized with Recombivax® HB per an alternative 2-dose schedule of 10 micrograms intramuscularly (IM) given 4 to 6 months apart. Be aware, however, that the introduction of this alternate dosing schedule does increase operational complexity for immunization administration in a clinic serving multiple ages of children and will therefore increase resultant risk of error.

Exclusions  
Unspecified

#### DENOMINATOR TIME WINDOW

Time window is a single point in time

#### NUMERATOR TIME WINDOW

Fixed time period

#### DATA SOURCE

Administrative data  
Medical record

#### LEVEL OF DETERMINATION OF QUALITY

Individual Case

#### PRE-EXISTING INSTRUMENT USED

Unspecified

### Computation of the Measure

#### SCORING

Rate

#### INTERPRETATION OF SCORE

Better quality is associated with a higher score

#### ALLOWANCE FOR PATIENT FACTORS

Unspecified

#### STANDARD OF COMPARISON

Internal time comparison

### Evaluation of Measure Properties

#### EXTENT OF MEASURE TESTING

Unspecified

### Identifying Information

#### ORIGINAL TITLE

Percentage of adolescents who are up-to-date with recommended immunizations (Hep B, MMR, tetanus, and verification of varicella immunity).

#### MEASURE COLLECTION

[Immunizations Measures](#)

#### DEVELOPER

Institute for Clinical Systems Improvement

#### ADAPTATION

Measure was not adapted from another source.

#### RELEASE DATE

2003 Jul

#### REVISION DATE

2004 Jun

#### MEASURE STATUS

This is the current release of the measure.

This measure updates a previous version: Institute for Clinical Systems Improvement (ICSI). Immunizations. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2003 Jul. 51 p.

#### SOURCE(S)

Institute for Clinical Systems Improvement (ICSI). Immunizations. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2004 Jun. 56 p. [61 references]

## MEASURE AVAILABILITY

The individual measure, "Percentage of adolescents who are up-to-date with recommended immunizations (Hep B, MMR, tetanus, and verification of varicella immunity)," is published in "Health Care Guideline: Immunizations." This document is available from the [Institute for Clinical Systems Improvement \(ICSI\) Web site](#).

For more information, contact ICSI at, 8009 34th Avenue South, Suite 1200, Bloomington, MN 55425; phone: 952-814-7060; fax: 952-858-9675; Web site: [www.icsi.org](http://www.icsi.org); e-mail: [icsi.info@icsi.org](mailto:icsi.info@icsi.org).

## NQMC STATUS

This NQMC summary was completed by ECRI on April 19, 2004. This summary was updated by ECRI on October 11, 2004.

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Date Modified: 11/1/2004

